

### **Remarks**

Claims 1-40 are pending in the present application.

*1.) Rejection of Claims 18-20, 25 and 26 under 35 USC §112*

Claims 18-20, 25 and 26 are rejected under 35 USC §112 as being indefinite. In response, Claims 18-20, 25 and 34 have been amended. Specifically, the term “flowrate” has been replaced with the term “flow” where appropriate.

*2.) Rejection of Claims 1-3, 7 and 18-20 under 35 USC §102*

Claims 1-3, 7 and 18-20 are rejected under 35 USC §102 as being anticipated by US Patent 5,434,911 (Gray). Specifically, the Examiner asserts that Gray teaches an apparatus for monitoring a meter that includes: a meter (Figure 1, Unit 8); an electronic data recorder (Figure 1, Unit 6); an external unit (Figure 1, Unit 4) that uses a communication protocol that comprises an initialization signal, an interval identification signal (“call-in time interval” in last paragraph of Column 10), and a clock signal (Figure 2a).

In response, the Applicant notes that the communication protocol as recited by Claim 1 includes: an initialization signal, an interval identification signal, and a clock signal. These elements are supported and described in Paragraph 40 of the specification, which states:

At the beginning of each 15 minute interval, an initialization signal **44** is sent with the clock signal. It is immediately followed by interval identification signal **46** that identifies which 15 minute cycle is being recorded. Figure 7 shows a timing diagram of an initialization signal **44** followed by an interval identification signal **46** and a clock signal **42** operating at 1200 Hz. In the embodiment shown, the interval identification signal **46** is two 1200 Hz signal widths in duration.

In the communication protocol utilized by the present invention, an initialization signal is transmitted, followed by the interval identification signal and the clock signal. As shown in Figures 6 – 10b, the initialization signal **44** is clearly distinct and separate from the

signals that follow. The initialization signal serves to alert the receiving station of the following data transmission. It is a necessary and critical part of the communication protocol of the present invention.

The interval identification signal serves to identify the expiration of a time period or a non-timed interval request for information. *Paragraph 40.* If the reading intervals are received in the proper sequence, the data is stored. However, if a reading interval is received out of sequence, all of the stored time dependent data is reset to the initial values. The storage of data is resumed once reading intervals are received in the proper sequence. This allows the system to compensate for a situation where the meter is disconnected from the EDR and later reconnected. *Paragraph 41.* Thus, the interval identification signal is used to identify which readings are to be taken and stored. Once they are taken, the readings are stored by the system until the proper time for transmission to the utility

In comparison, Gray does not teach nor suggest the use of an initialization signal. In the passages of Gray cited by the Examiner (*i.e.*, “call-in time interval” on line 65, column 10 and Figure 2a), an initialization signal is not addressed. This is reflected by the Examiner’s lack of reference to alleged corresponding features in Gray. Additionally, the term “call in time” cited in Gray by the Examiner (line 65, column 10) refers to a time for the MIU to contact the host computer. Gray is directed towards an MIU that “calls in” the stored data to a host computer at a pre-scheduled time. *See, Abstract of Gray.*

Consequently, Gray does not anticipate Claims 1-3, 7 and 18-20 because: 1.) Gray does not teach or suggest the use of an initialization signal; and 2.) the “call in time interval” of Gray refers to the transmission time of stored data to the host computer and not the time interval for collecting the meter data as claimed.

3.) Rejection of Claims 4-6 under 35 USC §103

Claims 4-6 are rejected under 35 USC §103 as being obvious over Gray in view of US Patent 5,434,911 (Hamilton). The rejection is overcome for at least the reasons explained previously in Section 2. Specifically, Gray fails an anticipating reference since: 1.) Gray does not teach or suggest the use of an initialization signal; and 2.) the

“call in time interval” of Gray refers to the transmission time of stored data to the host computer and not the time interval for collecting the meter data as claimed.

Additionally, the citation of Hamilton as prior art is improper because both Hamilton and the present invention are commonly owned. As required by MPEP § 706.02(l)(2), the applicant submits the following statement.

Statement Establishing Common Ownership

The present Application 10/701,028 and US Patent 5,434,911 were, at the time the invention of Application 10/701,028 was made, owned by Neptune Technology Group, Inc. of Tallasee, AL.

Consequently, this rejection fails because Hamilton is not a valid prior art reference.

*4.) Rejection of Claims 8-12 under 35 USC §103*

Claims 8-12 are rejected under 35 USC §103 as being obvious over Gray in view of what is known to one skilled in the art. The rejection is overcome for at least the reasons explained previously in Section 2. Specifically, Gray fails an anticipating reference since: 1.) Gray does not teach or suggest the use of an initialization signal; and 2.) the “call in time interval” of Gray refers to the transmission time of stored data to the host computer and not the time interval for collecting the meter data as claimed.

Additionally, Applicant again notes that 37 C.F.R. §1.104(d)(2) states:

**When a rejection in an application is based on facts within the personal knowledge of an employee of the Office, the data shall be as specific as possible, and the reference must be supported, when called for by the applicant, by the affidavit of such employee, and such affidavit shall be subject to contradiction or explanation by the affidavits of the applicant and other persons.**

In accordance with this rule, Applicant requests that the Examiner submit an affidavit stating that based on her personal knowledge, it is well known to one of ordinary skill in the art that the use the specific signal criteria consistent with Claims 8-12. In the alternative, Applicant requests that the Examiner either provide an additional reference showing the use of the non-disclosed elements or withdraw this rejection.

5.) Rejection of Claims 13-16, 23-26, 28, 31, 32, 34, 35, and 37-40 under  
35 USC §103

Claims 13-16 are rejected as being obvious over Gray in view of US Patent 6,952,970 (Furmidge). Claims 23-26, 28, 31, 32, 34, 35, 37 and 40 are rejected for the same reasons as Claims 1 and 13. Claim 38 is rejected for the same reasons as Claim 4. Claim 39 is rejected for the same reason as Claim 5.

The rejection of Claims 13-16, 23-26, 28, 31, 32, 34, 35, 37 and 40 is overcome for at least the reasons explained previously in Section 2. Specifically, Gray fails an anticipating reference since: 1.) Gray does not teach or suggest the use of an initialization signal; and 2.) the “call in time interval” of Gray refers to the transmission time of stored data to the host computer and not the time interval for collecting the meter data as claimed.

The rejection of Claims 38 and 39 is overcome for at least the reasons explained previously in Section 3. Specifically, Gray fails an anticipating reference since: 1.) Gray does not teach or suggest the use of an initialization signal; and 2.) the “call in time interval” of Gray refers to the transmission time of stored data to the host computer and not the time interval for collecting the meter data as claimed. Additionally, Hamilton is not a valid prior art reference due to common ownership.

6.) Rejection of Claims 17 and 33 under 35 USC §103

Claims 17 and 33 are rejected as being obvious over Gray in view of US Patent 4,938,053 (Jepson).

The rejection of Claims 17 and 33 is overcome for at least the reasons explained previously in Section 3. Specifically, Gray fails an anticipating reference since: 1.) Gray does not teach or suggest the use of an initialization signal; and 2.) the “call in time interval” of Gray refers to the transmission time of stored data to the host computer and not the time interval for collecting the meter data as claimed.

7.) Rejection of Claims 21, 22, 27 and 36 under 35 USC §103

Claims 21, 22, 27 and 36 are rejected as being obvious over Gray in view of US Patent 6,755,148 (Holowick).

The rejection of Claims 21, 22, 27 and 36 is overcome for at least the reasons explained previously in Section 3. Specifically, Gray fails an anticipating reference since: 1.) Gray does not teach or suggest the use of an initialization signal; and 2.) the "call in time interval" of Gray refers to the transmission time of stored data to the host computer and not the time interval for collecting the meter data as claimed.

8.) Conclusion

In view of the preceding amendments and remarks, the rejections have been overcome. Therefore, Applicant respectfully requests the withdrawal of all outstanding rejections and an issuance of a Notice of Allowance for all pending claims. Please apply any additional fees or credits to Deposit Account #: 50-0954, Reference #: N2215-63142.

Respectfully Submitted,

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